

Office Action Summary

Application No.

10/748,837

Applicant(s)

BAUMEISTER ET AL.

Examiner

Khai N. Nguyen

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on December 29, 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-38 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date See Continuation Sheet
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :September 07, 2004 and November 15, 2004.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on September 07, 2004 and November 15, 2004 were filed after the filing date of the instant application on December 29, 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "16 in Fig. 2" has been used to designate both the TANDEM SWITCH PCM/VOLT DELTA and the ASPECT ACD.

Also, the reference characters "12 in Fig. 1" and "16 in Fig. 2" have both been used to designate the tandem switch, but the specification referred only to reference character "12" as the tandem switch (pages 7-8).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "requested device 6" as described in the specification (page 5 lines 5-6). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Shtivelman (U.S. Publication Number 2002/0054670 A1).

Regarding claims 1 and 24, Shtivelman teaches a method and a call routing system for use in directory assistance, said routing system (Fig. 1) comprising:

a primary call routing device (Fig. 1, 31 T-Server (TS), 47, 51) configured to receive directory assistance calls from callers (Fig. 1, 19) at a first directory assistance system (Fig. 1, 15), and to determine, for each of said calls, whether said calls will be handled by said first directory assistance system (Fig. 1, 15), or by a second directory assistance system (Fig. 1, 13) among a plurality of directory assistance systems (Fig. 1, paragraph hereinafter "par" [0031] lines 3-8, i.e., calls are routed according to programmable rules); and

a secondary router (Fig. 1, 29, 31), said secondary router configured to route said calls within said first directory assistance system (Fig. 1, 15) to said primary call routing device (Fig. 1, 31, 47, 51), said secondary router having a default call distribution logic, wherein if said primary call routing device (Fig. 1, 31, 47, 51) is off-line, said

secondary call router (Fig. 1, 29, 31) routes said calls among said first directory assistance system and said plurality of directory assistance systems according to said default distribution logic (Fig. 1, par [0031], par 0037] lines 9-15, i.e., monitors the level of incoming calls when the level exceeds the threshold then sends a command to TS 31 of processor 29 "secondary router" for beginning to divert calls among call centers).

Regarding claims 2 and 25, Shtivelman teaches a method and a call routing system, wherein said secondary router (Fig. 1, 29, 31) further maintains a means for determine the online/off-line status of said primary call routing device (Fig. 1, 11, 29, 31, par [0041], i.e., records the progress of the system and this information will be used to aid call routing rules).

Regarding claims 3 and 26, Shtivelman teaches a method and a call routing system, wherein said directory assistance system (Fig. 1) further comprises a means for determining the on line/off-line status of said primary call routing device (Fig. 1, 31, 47, 51), and delivering information on said status to said secondary router (Fig. 1, 29, 31) (Fig. 1, par [0037] lines 9-15).

Regarding claims 4 and 27-29, Shtivelman teaches a method and a call routing system, further comprising a transfer router (Fig. 1, 11, 15, 51, Fig. 2), said transfer router configured to transfer calls between said directory assistance system (Fig. 1, 11, 15, 43 Trunk, 51, Fig. 2, 103) and a second directory assistance system (Fig. 1, 11, 13,

41 Trunk, 49, Fig. 2, 107) via a Wide Area Network (WAN), the Internet, and/or a packet switched network (Figs. 1-2, paragraphs [0045]- [0047], i.e., network 11 can be a packet data network (e.g., Internet) or other wide area packet networks, and calls are received and routed via class 5 PSTN switch "WAN", an Internet Protocol router or the like between call centers).

Regarding claims 5-6 and 30, Shtivelman teaches a method and a call routing system, wherein said primary call routing device routes a portion of said plurality of said incoming calls to said second directory assistance system when said directory assistance system is lo experiencing high call volume and/or offline (Figs 1-2, par [0048], i.e., calls are diverted when call volume is exceeded a preset threshold "offline", and par [0050])

Regarding claims 7-8, Shtivelman teaches a call routing system, further comprising an automatic call distribution call center, configured to receive a portion of said is plurality of calls from said secondary router and distribute them among a plurality of operator terminals disposed within said directory assistance system, and where in said second directory assistance system further comprises a second automatic call distribution call center configured to receive a portion of said plurality of calls from said secondary router and distribute them among a plurality of operator terminals disposed within said second directory assistance system (Fig. 1, par [0050], i.e., call center 13,

call center 15 and other call centers may only have a certain percentage of incoming calls).

Regarding claims 9 and 31, Shtivelman teaches a method and a call routing system for use in a directory assistance system (Figs. 1-2), said routing system comprising:

- a primary call routing device (Fig. 1, 31, 47, 51) configured to receive directory assistance calls from callers (Fig. 1, 19) (Fig. 1, par [0031] lines 3-8);

- a frequent caller database (Fig. 1, 81), configured to store information corresponding to frequent callers (Fig. 1, par [0026] lines 11-14, i.e., database 81 contains information needed by operators for processing calls); and

- a frequent caller routing module (Fig. 1, 11, 29, 33 Statistical Server), configured to determine if a particular caller's information is stored in said frequent caller database and to determine if said caller is to receive priority call routing (Fig. 1, par [0041], i.e., ratio of priority calls to routine calls statistics during previous calls will be used to aid in setting or changing routing rules, and Fig. 3, par [0053]).

Regarding claims 10-11, Shtivelman teaches the call routing system (Fig. 1), wherein said frequent call routing module is located within said primary call routing device, and wherein said frequent call routing module is a software application within said primary call routing device (Fig. 1, par [0059] lines 5-8).

Regarding claims 12-16 and 32-34, Shtivelman teaches the call routing system (Fig. 1), wherein said frequent call routing module is configured to convey the priority call routing decision to said primary call routing device to perform routing of said call, wherein said information corresponding to frequent callers includes a listing of frequent callers to said directory assistance system and the corresponding frequency of their calls (Figs. 1-3, par [0013], and par [0031] lines 9-14), wherein said frequency of calls made to said directory assistance system are stored as calls per month, wherein said information corresponding to frequent callers includes a listing of frequent callers to said directory assistance system are stored in one of a plurality of designated call frequency groups, and wherein said frequent caller routing module makes priority routing decisions for incoming calls based on said call frequency group assigned to said caller, in said frequent caller database (Figs. 1-2, par [0034], and par [0040], i.e., call frequency groups such as emergency workers, certain authorities).

Regarding claims 17-19 and 35-36, Shtivelman teaches the call routing system, wherein said frequent caller routing module attempts to designate a desired predefined percentage of calls of the total numbers of calls to said directory assistance system as priority calls, wherein said desired percentage of calls is 3-5% of the total call volume to said directory assistance, and wherein said frequent caller routing module dynamically adjusts priority routing decisions for incoming calls by changing said call frequency groups that are designated for priority routing so as to maintain said predefined percentage of calls of the total numbers of calls to said directory assistance system,

routed as priority calls (Fig. 1, 15, 16, 19, 21, par [0038], i.e., selection of a percentage of callers for diversion, and par [0040]).

Regarding claims 20-22 and 37-38, Shtivelman teaches the call routing system, wherein said priority call routing includes expediting the handling of said call within said directory assistance system (Fig. 1, 16, 19, 21, par [0042] lines 5-6, i.e., callers have correct code/password would be immediately routed), wherein said priority call routing includes routing said call within said directory assistance system to a particular operator terminal among a plurality of operator terminals, and wherein said particular operator terminal is an increased skill operator (par [0042] lines 12-15, i.e., routed to appropriate services).

Regarding claim 23, Shtivelman teaches a call routing system (Fig. 1) for use in directory assistance, said routing system comprising:

a primary call routing device (Fig. 1, 31 T-Server (TS), 47, 51) configured to receive directory assistance calls from callers (Fig. 1, 19) at a first directory assistance system (Fig. 1, 15), and to determine, for each of said calls, whether said calls will be handled by said first directory assistance system (Fig. 1, 15), or by a second directory assistance system (Fig. 1, 13) among a plurality of directory assistance systems (Fig. 1, paragraph hereinafter "par" [0031] lines 3-8, i.e., calls are routed according to programmable rules);

a frequent caller database (Fig. 1, 81), configured to store information corresponding to frequent callers (Fig.1, par [0026] lines 11-14, i.e., database 81 contains information needed by operators for processing calls);

a frequent caller routing module (Fig. 1, 11, 29, 33 Statistical Server), configured to determine if a particular caller's information is stored in said frequent caller database and to determine if said caller is to receive priority call routing (Fig. 1, par [0041], i.e., ratio of priority calls to routine calls statistics during previous calls will be used to aid in setting or changing routing rules, and Fig. 3, par [0053]); and

a secondary router (Fig. 1, 29, 31), said secondary router configured to route said calls within said first directory assistance system (Fig. 1, 15) to said primary call routing device (Fig.1, 31, 47, 51), said secondary router having a default call distribution logic, wherein if said primary call routing device (Fig. 1, 31, 47, 51) is off-line, said secondary call router (Fig. 1, 29, 31) routes said calls among said first directory assistance system and said plurality of directory assistance systems according to said default distribution logic (Fig. 1, par [0031], par [0037] lines 9-15, i.e., monitors the level of incoming calls when the level exceeds the threshold then sends a command to TS 31 of processor 29 "secondary router" for beginning to divert calls among call centers).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bushnell et al. (U.S. PAT 4,620,066) teach a method and an apparatus for sharing operators among several assistance centers.

Miloslavsky (U.S. PAT 6,229,888) teaches a system and a method for routing calls in a plurality of call centers.

Kosiba et al. (U.S. PUB 2002/0184069 A1) teach a system and a method for predicting an expected performance of a call center/processing center system.

Ryan et al. (U.S. PAT 6,744,858) teach a system and a method for routing calls in a wide area network connect multiple call centers.

Bae (U.S. PAT 6,801,619) teaches a device and a system for providing customer services over the Internet.

Armstrong et al. (U.S. PAT 6,816, 584) teach a method for routing a call through a telecommunications network.

Elsay (U.S. PAT 6,845,155) teach a method and a system for routing calls where calls are directed to different call centers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI N. NGUYEN whose telephone number is (571)270-3141. The examiner can normally be reached on Monday - Thursday 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad F. Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. N. N./
Examiner, Art Unit 2614
02/21/2008